(e) The country has over half of its area unexplored or poorly explored requiring exploration risk capital, induction of state-of-art technologies, new geological ideas and management practices to discover hydrocarbon resources. Participation by foreign companies and domestic private companies will help in achieving the objective of complete appraisal of the Indian sedimentary basins in a timely manner. The policy of the Government for inviting private participation in exploration has started yielding rich dividends as a number of hydrocarbon discoveries have been made including large gas discoveries in the Krishna-Godavari deep water blocks and large oil discoveries in Rajasthan.

Alternative to Petrol and Diesel

2926. SHRI N.R. GOVINDARAJAR: Will the Minister of PETROLEUM AND NATURAL GAS be pleased to state:

(a) whether any research is being conducted at national and international level to find out an alternative fuel to petroleum and diesel;

(b) if so, the details thereof; and

(c) the success achieved in this regard so far?

THE MINISTER OF PETROLEUM AND NATURAL GAS (SHRI MANI SHANKAR AIYAR): (a) Yes, Sir. Research and Development (R&D) institutions and academic institutions are undertaking research for finding viable alternative fuels to petroleum and diesel. At the national level, most such research has been in areas of bio-fuels like ethanol and bio-diesel. In addition, research and experiments involving the use of hydrogen mixed with Compressed Natural Gas (CNG), and research and development activities for tapping Coal Bed Methane (CBM), natural gas through Underground Coal Gasification (UCG), and accessing gas hydrates, are being undertaken.

(b) and (c) In India, based on successful implementation of pilot projects, 5% ethanol-blended petrol programme is being implemented in the notified States and Union Territories. The field trials conducted by the oil marketing companies with bio-diesel blended diesel in the transportation sector have yielded satisfactory results.

CNG is being used extensively in the transportation sector in Delhi, Mumbai and some other major cities and its further use in other polluted

cities is planned subject to expansion of pipeline infrastructure and increased availability of natural gas, and economic viability.

For hydrogen, the Ministry of Petroleum and Natural Gas has recently set up a Hydrogen Corpus Fund with a corpus of Rs. 100 crore with contribution of major oil and gas companies and the Oil Industries Development Board (OIDB) for supporting research and development in various aspects of hydrogen, which could substitute a part of natural gas as transport fuel in future. Demonstration projects in pipeline include using 10% hydrogen in CNG at the R&D centre of India Oil Corporation at Faridabad in September, 2005 and a similar demonstration project later in Delhi.

In order to harness a new non-conventional sources of energy in the country, Government approved a CBM policy in July, 1997 for the exploration and exploitation of CBM gas, under which 16 CBM blocks have been awarded till date to various companies. Initial commercial production is expected to commence by next year. For tapping natural gas through underground coal gasification, Oil and Natural Gas Corporation (ONGC) have signed a Memorandum of Understanding (MoU) with Skochinsky Institute of Russia for commercialization of natural gas through UCG. GAIL too have an MoU with the Government of Rajasthan for gasification of lignite. GAIL have tied up with ERGO Energy, Canada for establishing a pilot plant at Barmer in Rajasthan and at Mannargudi in Tamil Nadu.

At present, there is no commercial production of gas hydrates in any part of the world and the technology is only at the research and development stage, and in India also R&D activities are continuing.

Special dividend by oil PSUs

2927. SHRI B.K. HARIPRASAD: Will the Minister of PETROLEUM AND NATURAL GAS be pleased to state:

(a) whether major PSU oil companies have booked losses in the first quarter of the current fiscal and if so, whether there is any likelihood of their skipping dividends this year;

(b) whether the skipping of dividends by oil companies could adversely affect the non-tax revenue collection of the Centre for 2005-06 for Government being the largest shareholder of the oil PSUs; and